

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/09185

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> H01L 21/306

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H01L 21/304, 21/306, 21/308

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Jitsuyo Shinan Toroku Koho	1996-2001
Kokai Jitsuyo Shinan Koho	1971-2001	Toroku Jitsuyo Shinan Koho	1994-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
EX	JP, 2001-68444, A (Mitsubishi Materials Silicon Corp.), 16 March, 2001 (16.03.01) (Family: none)	1-8, 18
A	EP, 864533, A2 (Shinetsu Handotai Co. Ltd.), 16 September, 1998 (16.09.98), Claims	9-15
X	Fig. 1, Fig. 2 & JP, 10-310883, A	16-20
A	JP, 11-162953, A (Mitsubishi Materials Silicon Corp.), 18 June, 1999 (18.06.99) (Family: none)	1-20
A	JP, 3-1537, A (Shin Etsu Handotai Co., Ltd.), 08 January, 1991 (08.01.91) (Family: none)	13-15
A	JP, 5-291238, A (Nippon Steel Corporation), 05 November, 1993 (05.11.93) (Family: none)	13-15

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
27 March, 2001 (27.03.01)Date of mailing of the international search report  
03 April, 2001 (03.04.01)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## PCT REQUEST

F0575PCT

Draft (NOT for submission) - printed on 13.08.2001 02:17:13 PM

<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b>	<b>Form - PCT/RO/101 PCT Request</b>	
<b>0-4-1</b>	Prepared using	<b>PCT-EASY Version 2.91 (updated 01.01.2001)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	<b>Receiving Office (specified by the applicant)</b>	<b>Japanese Patent Office (RO/JP)</b>
<b>0-7</b>	<b>Applicant's or agent's file reference</b>	<b>F0575PCT</b>
<b>I</b>	<b>Title of invention</b>	<b>ETCHANT, ETCHING METHOD AND SEMICONDUCTOR SILICON WAFER</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>SHIN-ETSU HANDOTAI CO., LTD.</b>
<b>II-5</b>	Address:	<b>4-2, Marunouchi 1-chome Chiyoda-ku, Tokyo 100-0005 Japan</b>
<b>II-6</b>	State of nationality	<b>JP</b>
<b>II-7</b>	State of residence	<b>JP</b>
<b>II-8</b>	Telephone No.	<b>03-3214-1831</b>
<b>II-9</b>	Facsimile No.	<b>03-3215-9040</b>
<b>III-1</b>	<b>Applicant and/or inventor</b>	
<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>MIYAZAKI, Seiichi</b>
<b>III-1-5</b>	Address:	<b>c/o Nagano Denshi Co., Ltd. 1393, Oaza Yashiro Kosyoku-shi, Nagano 387-8555 Japan</b>
<b>III-1-6</b>	State of nationality	<b>JP</b>
<b>III-1-7</b>	State of residence	<b>JP</b>

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IV-1	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	<b>agent</b>
IV-1-1	Name (LAST, First)	<b>ARAFUNE, Hiroshi</b>
IV-1-2	Address:	<b>5F Nikko Kagurazaka Bldg., 18 Iwato-cho Shinjuku-ku, Tokyo 162-0832 Japan</b>
IV-1-3	Telephone No.	<b>03-3269-2611</b>
IV-1-4	Facsimile No.	<b>03-3269-3590</b>
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<b>EP: AT BE CH&amp;LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR and any other State which is a Contracting State of the European Patent Convention and of the PCT</b>
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<b>KR SG US</b>
V-5	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	
V-6	<b>Exclusion(s) from precautionary designations</b>	<b>NONE</b>
VI-1	<b>Priority claim of earlier national application</b>	
VI-1-1	Filing date	<b>28 December 1999 (28.12.1999)</b>
VI-1-2	Number	<b>11-374052</b>
VI-1-3	Country	<b>JP</b>
VII-1	<b>International Searching Authority Chosen</b>	<b>Japanese Patent Office (JPO) (ISA/JP)</b>

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<b>VIII</b>	<b>Check list</b>	<b>number of sheets</b>	<b>electronic file(s) attached</b>
VIII-1	Request	4	-
VIII-2	Description	11	-
VIII-3	Claims	2	-
VIII-4	Abstract	1	-
VIII-5	Drawings	2	-
VIII-7	TOTAL	20	
	<b>Accompanying items</b>	<b>paper document(s) attached</b>	<b>electronic file(s) attached</b>
VIII-8	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-18	Figure of the drawings which should accompany the abstract	1	
VIII-19	Language of filing of the international application	Japanese	
<b>IX</b>	<b>Signature of applicant or agent</b>		
IX-1	Name (LAST, First)		
IX-2	Capacity		

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/JP
10-6	Transmittal of search copy delayed until search fee is paid	

## FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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